ABSTRACT OF THE DISCLOSURE

The hyperbranched polymers are at least one anhydrosugar-related compound selected from the dianhydrosugar alcohol [1]:

$$\begin{array}{c|c}
O & OR & O \\
CH_2-CH-(CH)_n-CH-CH_2
\end{array}$$
(1)

(wherein R is hydrogen atom or a hydrocarbon group having from 1 to 30 carbon atoms, provided that nR's are equal to or different from one another and at least one R of nR's is hydrogen atom, and symbol n is an integer from 1 to 10) and the anhydrosugar alcohol [2]:

$$\begin{array}{c|cccc}
OR_{2} & O & OR_{3} \\
& & & & & & \\
R_{1} - (CH)_{m} - CH - CH - (CH)_{p} - R_{4}
\end{array} (2)$$

(wherein each of R_1 , R_2 , R_3 and R_4 is hydrogen atom or a hydrocarbon group having from 1 to 30 carbon atoms; provided that R_1 , mR_2 's, pR_3 's and R_4 are equal to or different from one another and at least one R_2 or R_3 of said mR_2 's and pR_3 's is hydrogen atom, respectively; and symbol m is zero (0) or an integer from 1 to 20 and symbol p is an integer from 1 to 20, provided that symbol m+p is an integer from 1 to 20)

or at least one anhydrosugar-related compound selected from the dianhydrosugar alcohol [1] and/or the anhydrosugar alcohol [2] with at least one sugar compound selected from the anhydrosugar as represented by the general formula [3], [4], [5], [6] or [7].

The hyperbranched polymers are readily prepared by polymerizing the dianhydrosugar alcohol or the anhydrosugar [1] or [2] or the dianhydrosugar alcohol or the anhydrosugar [1] or [2] together with the anhydrosugar in the presence of a cationic or anionic initiator.